

FEASIBILITY STUDY

Raleigh
Six Forks Road (SR 1005)
Sawmill Road to Baileywicke Road (SR 1830)
Wake County
U-2216

Prepared By
Planning and Research Branch
Division of Highways
N. C. Department of Transportation

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The subject project is included in the 1987-1995 Transportation Improvement Program for feasibility study and/or right-of-way protection. This report provides a brief, initial analysis of possible improvements. The project is not currently funded.

I. GENERAL DESCRIPTION

The proposed project consists of widening Six Forks Road (SR 1005) from Sawmill Road to Baileywicke Road (SR 1830), a distance of 1.3 miles. Provision of a five-lane (64-foot) curbed roadway appears to be feasible.

II. PURPOSE OF PROJECT

Six Forks Road is designated a major thoroughfare in the Raleigh-Cary-Garner Thoroughfare Plan and functions as a major radial route into the City from the north. The current traffic volume of 12,500 VPD is expected to increase to approximately 27,300 VPD by the end of the planning period (year 2007). These volumes exceed the capacity of the existing two-lane roadway. The provision of additional lanes will alleviate congestion in a rapidly developing area.

The project has received strong local support. The City of Raleigh plans to widen the adjoining segment of Six Forks Road (from Sawmill Road to Lynn Road) to a five-lane, 64-foot curbed roadway in 1988.

Existing pavement width throughout the studied project area is 24 feet. Horizontal and vertical alignment are generally good. Existing right-of-way is 60 feet. Some curb and gutter and pavement widening have been provided by developers at two points (near Strickland Road and Farrington Drive). The curb and gutter has been positioned to accommodate an ultimate 64-foot width.

Speed limit in the studied area is 45 MPH. Traffic signals exist at Sawmill and Strickland Roads. There are no structures on the studied segment of Six Forks Road. Development along the project is primarily residential; however, shopping centers have been constructed near Sawmill Road and Strickland Road. A transition from residential to commercial development appears likely in the near future.

III. RECOMMENDED IMPROVEMENTS

Widening Six Forks Road to a multi-lane facility is highly desirable. Provision of a five-lane (64-foot) curbed roadway is recommended. Acquisition of a 90-foot right-of-way will be necessary to contain construction. The recommended cross section is in agreement with the Thoroughfare Plan. The City of Raleigh concurs in the recommended 64-foot curbed width.

The estimated cost of recommended improvements is \$3,110,000 including \$1,450,000 for construction and \$1,660,000 for right-of-way and utilities.

IV. ALTERNATIVES

There are no feasible alternatives to widen the existing roadway. Consideration should be given to the provision of seven lanes at the Strickland and Sawmill Road intersections.

V. POSSIBLE ENVIRONMENTAL IMPACTS

No significant environmental impacts are anticipated. No homes or businesses are to be relocated. Some increase in noise levels may result.

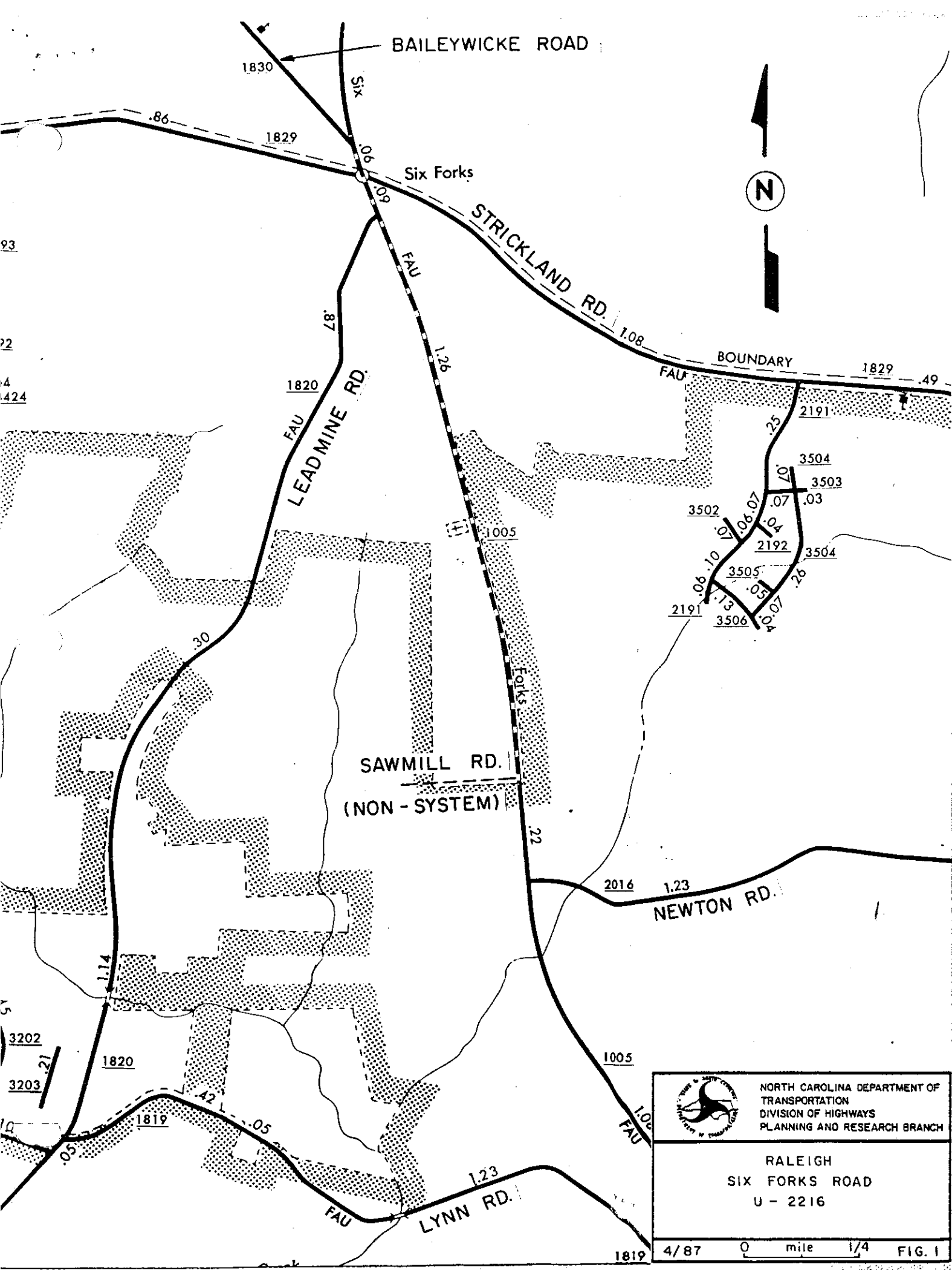
VI. SCOPE OF STUDY

Construction cost estimates, furnished by the Roadway Design Unit, were based on a 1"= 200 ft. contour map. Right-of-Way estimates were furnished by the Right-of-Way Branch following a field review.

VII. FUTURE ACTIVITIES

The City of Raleigh should continue to work with developers to accomplish right-of-way dedication and curb and gutter installation. Preparation of functional designs would assist in this process.

WE/sdt



BAILEYWICKE ROAD

1830

Six

1829

Six Forks

FAU

STRICKLAND RD.

1.08

BOUNDARY

1829

.49

1820

LEADMINE RD.

.87

1.26

1005

Forks

SAWMILL RD.

(NON - SYSTEM)

22

2016

NEWTON RD.

1.23

1.14

1820

1819

.42

.05

LYNN RD.

1.23

1005

FAU

1819

N



NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION
DIVISION OF HIGHWAYS
PLANNING AND RESEARCH BRANCH

RALEIGH
SIX FORKS ROAD
U - 2216

4/87 0 mile 1/4 FIG. 1